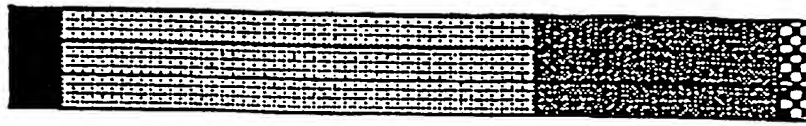


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1 Wild type fiber trimer

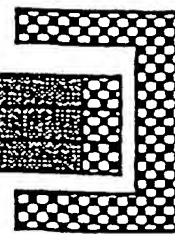


c Fiber-penton interaction



R-G-D

Mediates
internalisation of
virus via Integrins
on the cell surface



CAR Receptor-
fiber interaction
mediates binding
to the cell surface



3 Recombinant fiber



R-G-D

Cellular receptor
binding to new
ligand on
recombinant fibers

Code

Fiber tail

Fiber shaft

Fiber knob

New trimerisation motif

Linker motif

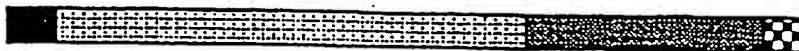
New cellbinding ligand

Native trimerisation motif

Nuclear localisation signal

Fig. 1

Wild type fiber.



Type A



Type A1. Shaft repeat 1.



Type A7. Shaft repeats 1-7



Type B



Type C



R1

R18-21

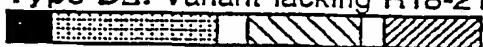
Type D



R 1-8

R18-21

Type DΔ. Variant lacking R18-21



Type E. Contains A, B and C sheets of knob.



Code



Fiber tail



Fiber shaft



Fiber knob



New trimerisation motif



Linker motif



New cellbinding ligand



Native trimerisation motif

R = Shaft repeat

Linker motifs

ASGGPE = Pseudo exo

ASEGNSD = TPA

ASTPEPD P = Ab Hinge, mouse

AKKLNDQA PKSD from SpA

TPLGDTTHTSG = Upper hinge from human IgG3
(GGGGS)₄

Fig. 2

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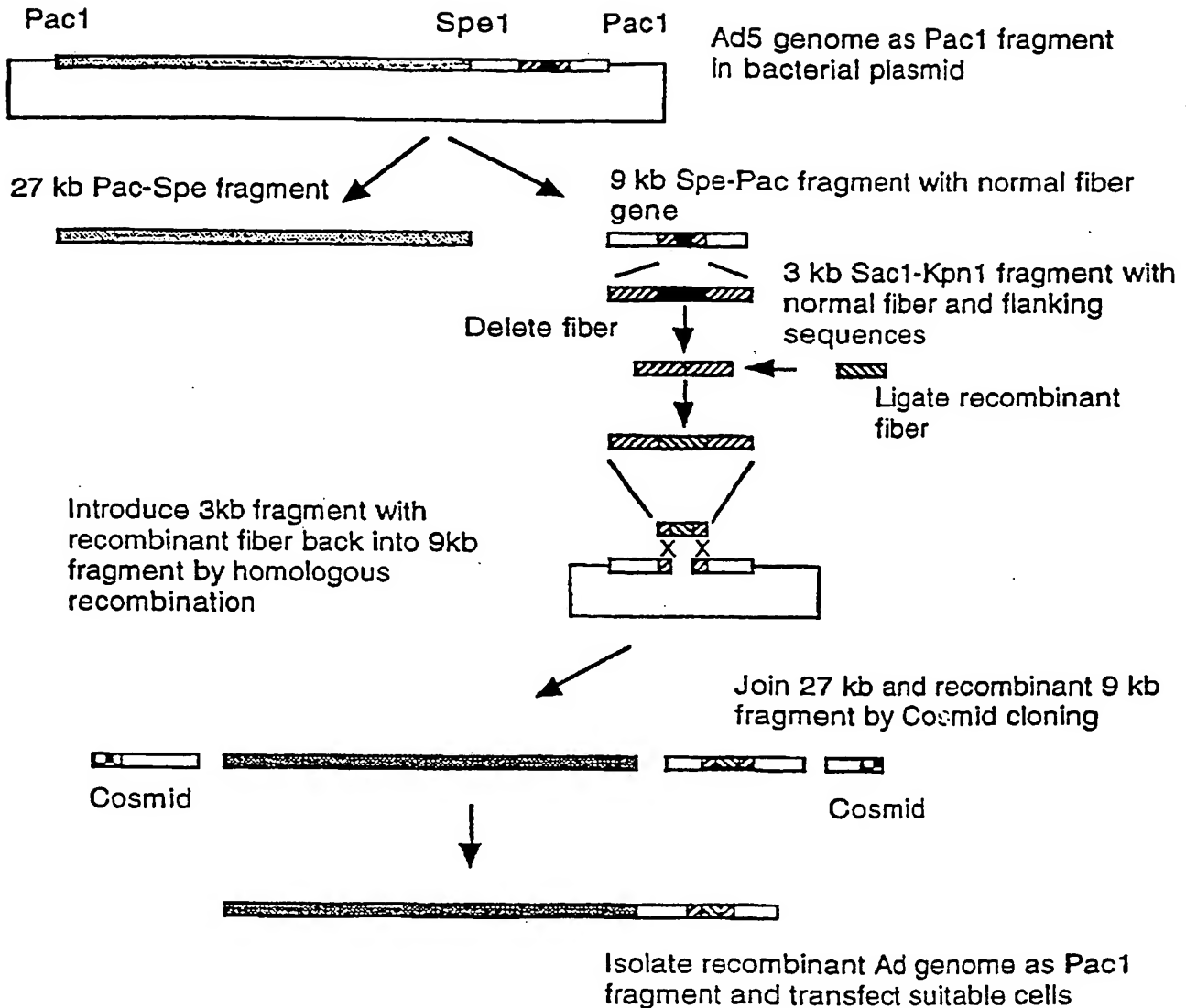


Fig. 3

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Type A**Time in days for development of plaques on primarily transfected cells**

A1 Knob



14

A7 Knob



11-14

A1 RGD



23

A7 RGD



16

A7 NLS RGD



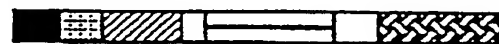
Not known

A1 EGF



Uncertain

A1 scFv



Uncertain

A1 scTCR



Uncertain

A7 scTCR



Uncertain



As WT



As WT



As WT

Color code

Fiber tail



Fiber shaft



Fiber knob



New trimerisation motif



Linker motif



EGF



Native trimerisation motif



Single chain antibody

V α V β C β C κ 

RGD









Nuclear localization signal

Fig. 4a

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*Time in days for development of
plaques on primarily transfected
cells*



Type B

	21
	23
	No plaques
	12
	11
	No plaques

Type C

	Uncertain
---	-----------

Type D

	15
	Uncertain

Code











	Fiber tail		(Gly4Ser)4 linker
	Fiber shaft		Turn b from repeat 17 of Ad5 fiber shaft
	Fiber knob		Turn b from repeat 22 of Ad5 fiber shaft
	New trimerisation motif		
	Linker motif		
	EGF		
	Native trimerisation motif		

Fig. 4b